PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

13/4

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WIPO PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)* see form PCT/ISA/210 (second sheet)	
Applicant's or agent's file reference see form PCT/ISA/220	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2005/033994	23.09.2005	30.09.2004

International Patent Classification (IPC) or both national classification and IPC
G06F9/46

Applicant
CITRIX SYSTEMS, INC.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:	Authorized Officer
European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Lo Turco, S Telephone No. +49 89 2399-6969

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2005/033994

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

   ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

   a. type of material:

   ☐ a sequence listing

   ☐ table(s) related to the sequence listing

   b. format of material:

   ☐ in written format

   ☐ in computer readable form

   c. time of filing/furnishing:

   ☐ contained in the international application as filed.

   ☐ filed together with the international application in computer readable form.

   ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 2-26

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination *(specify)*:

☒ the description, claims or drawings *(indicate particular elements below)* or said claims Nos. 2-26 are so unclear that no meaningful opinion could be formed *(specify)*:

see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the whole application or for said claims Nos.

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form
- ☐ has not been furnished
- ☐ does not comply with the standard

the computer readable form
- ☐ has not been furnished
- ☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.

☐ See separate sheet for further details

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	
	No:	Claims	1
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1
Industrial applicability (IA)	Yes:	Claims	1
	No:	Claims	

2. Citations and explanations

see separate sheet

1. Document references

The following document is referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: WO 01/25894
D2: US 2003/0101292

2. Conciseness

The present application does not meet the requirements of Article 6 PCT, the reason therefor being that the present claims 1 and 14 have been drafted as separate independent claims, whereby both claims are method claims.

In fact, although these claims have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought and in respect of the terminology used for the features of that subject-matter. The aforementioned system claims therefore lack conciseness.

In order to overcome this objection, it would appear appropriate to file an amended set of claims defining the relevant subject-matter in terms of a single independent claim in each category followed by dependent claims covering features which are merely optional (Rule 6.4 PCT).

Moreover, the present application does not meet the requirements of Article 6 PCT, the reasons therefor being that the plurality of independent claims makes it difficult, if not impossible, to determine the matter for which protection is sought, and places an undue burden on others seeking to establish the extent of the protection.

3. Clarity

The present application does not meet the requirements of Article 6 PCT, the reasons therefor being stated below.

3.1 The expression "isolation scope", used for instance in independent claim 1 and throughout the whole set of claims, is vague and unclear in this context and leaves the

reader in doubt as to the meaning of the technical features to which it refers, the reason therefor being that it does not belong to the standard terminology of the technical field.

3.2 In addition, a similar objection is directed to following expressions:

- "a state suitable for moving" used for instance in independent claim 1 and throughout the whole set of claims, the reason therefor being that this expression is vague; and

- "a file system filter driver" and "a mini-filter" used in dependent claims 9 , 22 and 11, 24 respectively, the reason therefor being that the technical features associated to these expressions are not apparent.

4. Non-establishment of Opinion (Item III)

When considering the extent of the above conciseness and clarity objections raised under the provision of Article 6 PCT concerning the present set of claims, it is not considered feasible at the present stage of the procedure to give an opinion with regard to the requirements of Novelty, Inventive Step and Industrial Applicability as set out in Art. 33 (2), (3) and (4) PCT.

However, in order to give the applicant the possibility to amend the present set of claims with a view to the requirements of novelty, inventive step and industrial applicability as set out in the above mentioned articles, a brief summary of the prior art and the examination of present independent claim 1 will follow.

Document D1, which is provisionally considered to represent the most relevant state of the art, discloses [see D1 from page 2 line 21 to page 3 line 10] a method for creating *virtual application templates* for the purpose of propagating a single *application snapshot* into multiple, distinct images. According to this method, snapshot virtual templates allow multiple application instances to use the same fixed resource identifier by making the resource identifier virtual, privatizing it, and dynamically mapping it to a unique system resource identifier. When a snapshot is cloned from a virtual template, the common or shared data is used exactly as is, whereas the non-sharable data is either copied-on-write, multiplexed, virtualized, or customized-on-duplication. Snapshot virtual templating works by noting access to modified resources, fixed system IDs/keys and unique process-related identifies and automatically inserting a level of abstraction between these resources and

the application.

Again from the prior art document D2, which is provisionally considered to be equivalent to document D1 as closest prior art, discloses [see D2 on page 1 paragraphs 2, 9, 10 and 17] a method for isolating applications executing on a multiprogrammed system from each other so as to avoid interference between the applications. This method can be used to gain control over execution of an application such that, where necessary, the application code can be manipulated such that illegal operations can be prevented before they occur without significant overhead. This can be accomplished by dynamically modifying the application code with a dynamic execution layer interface such that the application can self-check during execution.

The present application does not meet the requirements of Article 33(2) PCT, the reason therefor being that the subject-matter of claim 1 is not new vis-a-vis D1. Equivalent objections can be raised considering document D2.

4.1 Independent claim 1

The subject-matter of independent claim 1 is disclosed in D1.

A method for moving an executing process from a first isolation scope to a second isolation scope [see D1 from page 2 line 21 to page 3 line 10, wherein the creation of another instance of the application represents the fact that each new application instance is associated to a new isolation scope. The action of moving from one isolation scope to another is implicit], the method comprising the steps of:

(a) determining that a process is in a state suitable for moving;

(b) changing an association of the process from a first isolation scope to a second isolation scope [see above comment: it is implicit]; and

(c) loading at least one rule associated with the second isolation scope [rules are implicitly associated with the access to resources by each application instance. For example, see D1 on page 3 lines 1-7, the resources contained in a snapshot virtual template can be dynamically redirected at restore time; or access to memory and storage is managed in a copy-on-write fashion; etc.].

5. Formal Objections

5.1 Should the applicant nevertheless regard some particular matter as inventive, an

independent claim including such matter should be filed taking account of Rule 6.3(b) PCT. Present independent claims are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1 or D2) being placed in a preamble (Rule 6.3(b)(I) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT).

5.2 Furthermore, the features of present independent claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT). Independent claims should therefore be redrafted accordingly. If, however, the applicant is of the opinion that the two-part form would be inappropriate, then reasons therefor should be provided in the letter of reply. In addition, the applicant should ensure that it is clear from the description which features of the claimed subject-matter are known from documents D1 or D2 (see the PCT Guidelines PCT/GL/3 III, 2.3a). The applicant should also indicate in the letter of reply the difference of the subject-matter of the new claim vis-à-vis the state of the art, preferably adopting a problem-solution approach, and the significance thereof.

5.3 Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.

5.4 The applicant is requested to file amendments by way of replacement pages in the manner stipulated by Rule 66.8(a) PCT. In particular, fair copies of the amendments should be filed preferably in triplicate.

5.5 Moreover, the applicant's attention is drawn to the fact that, as a consequence of Rule 66.8(a) PCT, the examiner is not permitted to carry out any amendments under the PCT procedure, however minor these may be.

5.6 Any statement hinting to subject-matter beyond the scope of the claims should be removed from the description [see for instance the application on page 114 lines].